

WHAT IS CLAIMED IS:

1. A wedge for a stator core fitted into a slot for inserting a coil, the slot having a slot opening portion and a general portion, the wedge comprising:
 - a substantially rigid, elongated body;
 - a wider portion disposed along a length of the body; and
 - a convex portion disposed opposite the wider portion, the convex portion having a smaller lateral size than that of the wider portion, wherein the convex portion is arranged protrusively from the wider portion
2. The wedge according to claim 1, wherein the wedge is formed by integrally molding the wider portion and the convex portion using synthetic resin.
3. The wedge according to claim 2, further comprising an inwardly depressed concave portion on a surface opposite to a surface on which the convex portion is formed of the wider portion of the wedge.
4. The wedge according to claim 3, wherein at least one of the wider portion and the convex portion has a tapered profile at at least one longitudinal end of the wedge whose lateral size or thickness decreases as the taper approaches the at least one longitudinal end.
5. The wedge according to claim 3, wherein at least one of the wider portion and the convex portion has a rounded profile at at least one longitudinal end of the wedge and an end corner of the rounded portion is finished in a curved pattern.
6. The wedge according to claim 2, wherein at least one of the wider portion and the convex portion has a tapered profile at at least one longitudinal end of the wedge whose lateral size or thickness decreases as the taper approaches the at least one longitudinal end.
7. The wedge according to claim 2, wherein at least one of the wider portion and the convex portion has a rounded profile at at least one longitudinal end of the wedge where an end corner of the rounded portion is finished in a curved pattern.
8. The wedge according to claim 1, wherein an inwardly depressed concave portion is formed on a surface opposite to a surface on which the convex portion is formed of the wider portion of the wedge.
9. The wedge according to claim 8, wherein at least one of the wider portion and the convex portion has a rounded profile at at least one longitudinal end of the wedge and an end corner of the at least one of the wider portion and the convex portion is finished in a curved pattern.

10. The wedge according to claim 1, wherein at least one of the wider portion and the convex portion has a tapered profile at at least one longitudinal end of the wedge whose lateral size or thickness decreases as the taper approaches the at least one longitudinal end.

11. The wedge according to claim 1, wherein at least one of the wider portion and the convex portion has a rounded profile at at least one longitudinal end of the wedge and an end corner of the at least one of the wider portion and the convex portion is finished in a curved pattern.

12. The wedge according to claim 1, wherein a lateral dimension of the wider portion is smaller than a lateral dimension of the slot in the stator core to form a predetermined clearance between the wider portion and an inner wall surface of the general slot.

13. The wedge according to claim 12, wherein the clearance is smaller than a size of an inner wall surface forming the slot opening portion in the stator core projected from an inner wall surface forming the general portion.

14. The wedge according to claim 13, wherein the clearance is smaller than a diameter of an electrical wire forming a coil to be inserted into the slot.

15. The wedge according to claim 12, wherein the clearance is smaller than a diameter of an electrical wire forming a coil to be inserted into the slot in the stator core.

16. The wedge according to claim 1, wherein a cross-section of the wedge has an essentially T-shape.

17. The wedge according to claim 3, wherein a cross-section of the wedge has an essentially Y-shape.

18. A wedge for a stator core fitted into a slot for inserting a coil arranged at an inner circumferential side of a ring-shape stator core such that the wedge closes an inner circumferential opening portion of the slot,

the slot having a slot opening portion having a reduced gap at an inner circumferential end of the slot, and a general portion having an increased gap compared with the slot opening portion at an outer circumferential side,

the wedge having a wider portion disposed in the general portion and a convex portion having a smaller lateral size than that of the wider portion, which is arranged protrusively from the wider portion and disposed in the slot opening portion.